

Preliminary Agenda

TUESDAY, SEPTEMBER 5th

REGISTRATION & BREAKFAST

Le Westin Montreal, 270 Rue Saint-Antoine O

7:30 AM - 8:30 AM — Breakfast

TRAININGS

8:30 AM - 10:15 AM	—	TRAINING Bringing your model into real time with eMEGASIM	TRAINING The Behind-the-Scenes of Inter-FPGA Communication Using High Speed Serial Links with RT-XSG/eMEGASIM	TRAINING Using HYPERSIM's Advanced Features - part I
10:15 AM - 10:35 AM	—	BREAK		
10:35 AM - 12:00 PM	—	TRAINING Achieving test automation with eMEGASIM	TRAINING State Space Nodal - how to use it efficiently	TRAINING Using HYPERSIM's Advanced Features - part II
12:00 PM - 1:00 PM	—	LUNCH		
1:00 PM - 2:45 PM	—	TRAINING Large Grid Model Import Made Easy with ePHASORSIM	TRAINING A New Way of Interacting with Your Model using RT-LAB	TRAINING Power System Protection, Control and Monitoring Applications with HYPERSIM and IEC 61850 - Part I
2:45 PM - 3:05 PM	—	BREAK		
3:05 PM - 4:30 PM	—	TRAINING ePHASORSIM: User Defined Modeling	TRAINING Multi-level Modular Converter (MMC) with HYPERSIM	TRAINING Power System Protection, Control and Monitoring Applications with HYPERSIM and IEC 61850 - Part II

REGISTRATION

4:00 PM - 6:00 PM — Registration period

WELCOME COCKTAIL

6:00 PM - 10:00 PM —  **WELCOME COCKTAIL**
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If you haven't reserved your room at Le Westin Montreal yet, do so now and take advantage of our group rate!

REGISTRATION & BREAKFAST

LE WESTIN MONTREAL, 270 RUE SAINT-ANTOINE O

7:15 AM - 8:30 AM — Breakfast

PRESENTATIONS

8:30 AM - 9:30 AM — Welcome to RT17!

9:30 AM - 10:40 AM — Power Systems Keynote

10:40 AM - 11:10 AM — BREAK

11:10 AM - 12:00 PM — Digital Transformation - Disrupt or be Disrupted!
by Denis Gaudreault, INTEL

12:00 PM - 1:00 PM — LUNCH

TECHNICAL PRESENTATIONS

	TRACK 1 - MICROGRID	TRACK 2 - POWER SYSTEMS	TRACK 3 - VARIOUS APPLICATIONS
1:00 PM - 1:30 PM	Global Trends on Microgrids, Smart Grid and Distributed Generation by Sima Seidi, TetraTech, Canada	HQ experiences in case of using Control System replica interfaced with Hypersim Real-time simulator in recent HVDC upgrade projects by Alpha Oumar Barry, IREQ, Canada	Photovoltaic Grid Connected Quasi Z-Source Inverter Based on Proportional Resonant Controller by Amol Ramelwar Veermata Jijabai Technological Institute, India
1:30 PM - 2:00 PM	Real-time simulation of predictive control of DC vehicular microgrids by Ali Mehrizi-Sani Washington State University, USA	A new switched-DC cascades multilevel inverter for distributed DC sources by Christopher Luciano, Tuskegee University, USA	Implementation of an Improved Space Vector PWM Control Strategy for Three-phase Four-leg Inverter in Wind-PV Hybrid Generation System using RT-LAB by Monalisa Pattnaik, NIT Roukela, India
2:00 PM - 2:30 PM	Real-Time co-Simulation for microgrids with OPAL-RT by Quoc Tuan Tran CEA, France	HIL Implementation using RT-LAB and dSPACE for Dynamic Phasor based Internal Model Control of Solid State Transformer in Microgrid Integration by Monika Bhagwat, Veermata Jijabai Technological Institut, India	Transmission photovoltaic energy by VSC-HVDC in Real Time: Application to Algerian – Spanish Power System Interconnection by Lila Ghomri
2:30 PM - 3:00 PM	Real-Time Hardware-in-the-Loop Co-Simulation Platform for Microgrid Analysis by Martine Chlela McGill University, Canada	Presentation by Sebastien Denetiere, RTE, France	Modeling and Real Time Simulation of Wind Power Systems Using Rt-Lab Platform by Mounir Khiaat, Kamel Benaama, Leilac Ghomri, Oran, Algérie
3:00 PM - 3:30 PM	BREAK		
3:30 PM - 4:00 PM	Research @NREL using OPAL-RT by Przemyslaw Koralewicz NREL, USA	Model-Based Design Using Substation Hardened Universal Relay by Jean-Philippe Gagnon, Gentec	Design and implementation of a Modular Multilevel Converter supported by HIL simulation by Frederic Colas, L2EP Ensam, France
4:00 PM - 4:30 PM	SEL's Experience with modelling microgrids by TBD SEL, USA	How to use real-time simulation for a better, modern and interactive teaching experience for power system by Danielle Nasrallah, OPAL-RT TECHNOLOGIES, Canada	Shared Power System Models: Accelerating Microgrid Testing and Integration by Christopher Smith, MIT-LL
4:30 PM - 5:00 PM	IDA-PB Control of SST in Hybrid AC/DC Microgrid with RT-LAB and dSPACE Hardware-in-Loop Implementation by Ragini Meshram Veermata Jijabai Technological Institute, India	Coming Soon	A Novel Parallel Robot for Fast Pick-and-Place-Operations by Peyman Karimi Eskandary

COCKTAIL AND DINNER

SALLE DE BAL WESTIN

5:30 PM - 6:00 PM

RECEPTION COCKTAIL



6:00 PM - 10:00 PM



AWARDS GALA DINNER
Evening sponsored by



BREAKFAST

LE WESTIN MONTREAL, 270 RUE SAINT-ANTOINE O

7:15 AM - 8:30 AM — Breakfast

PRESENTATIONS

- 8:30 AM - 9:00 AM — A New Era of Real-Time Simulation at OPAL-RT Technologies
- 9:00 AM - 10:00 AM — Power Electronics and Power-Hardware-in-the-Loop Keynote
- 10:00 AM - 10:30 AM — Innovating in a IoT, IoP World by [Greg Farthing, ABB](#)
- 10:30 AM - 11:00 AM — **BREAK**
- 11:00 AM - 11:30 AM — Automotive & Transportation Keynote
- 11:30 AM - 12:00 PM — Coming soon
- 12:00 PM - 1:00 PM — **LUNCH**

TECHNICAL PRESENTATIONS

	TRACK 1 - POWER HARDWARE IN THE LOOP & POWER SYSTEMS	TRACK 2 - POWER ELECTRONICS	TRACK 3 - TRANSPORTATION & OTHER APPLICATIONS
1:00 PM - 1:30 PM	Control- and Power-HIL for Development of Wind Farms by Florian Stelmaszek, Enercon, Germany	Automatic verification test bench for MV Drives based on "Hardware-In-the-Loop" simulation by Alain Dutrey, Schneider Electric, France	Bombardier presentation by Alain Bouchard
1:30 PM - 2:00 PM	Power Hardware-in-the-Loop and the KIT Energy Smart Home Lab Environment by Sebastian Hubschneider, Karlsruhe Institute of Technology, Germany	Real time and hardware-in-the-loop simulations of wind turbine components with the OneWind® Modelica Library by Paul Feja, Fraunhofer IWES, Germany	Real-Time Cooperative Localization With Extended And Unscented Kalman Filters For Intelligent Vehicles by Farid Bounini, Denis Gingras, Herve Pollart, Dominique Gruyer, Université de Sherbrooke, Canada
2:00 PM - 2:30 PM	A power-hardware-in-the loop test bench for electric machine emulation by Amitkumar K. S., Concordia University, Canada	OPAL-RT simulators in ABB MV Drives by Mathieu Giroux, ABB, Switzerland	Describing the NCREPT test facility and research with regards to the dyno and the associated driving schedules by Chris Farnell, Arkansas, USA
2:30 PM - 3:00 PM	Presentation by CENACE	HIL Implementation of Model Predictive Direct Current Control Algorithm for Power Converter using dSPACE and OPAL-RT by Nikhil Pagar	Virtual Test Bench For Marine Controllers by Dr Mukherjee Suvajit, Rolls-Royce, Singapore
3:00 PM - 3:30 PM	BREAK		
3:30 PM - 4:00 PM	Status of Energy Lab 2.0 and overview of Power-Hardware-in-the-Loop activities by Jörn Geisbüsch, Karlsruhe Institute of Technology, Germany	AC power Systems for Grid Simulation, by Mahesh Thaker, BSEE, Ammetek Programmable Power	Real-Time Application of Proprioceptive Tactile Sensing with Robotic Graspers by Bruno Belzile, McGill University, Canada
4:00 PM - 4:30 PM	The importance of Electrical Fault Insertion in HILS Applications by Bob Stasonis, Pickering	High-Fidelity Power Motor Emulator for Testing Inverter and Control by Danielle Nasrallah, OPAL-RT TECHNOLOGIES	Vehicle-Grid Integration HIL for Designing Advanced Ancillary Services for Power Systems by Yutaka Ota, Tokyo City University, Japan
4:30 PM - 5:00 PM	Power flow control in grid connected microgrid: Software-in-loop Implementation using RT-LAB by Mahendra Rane, Mumbai, India	Real Time Control of Doubly Fed Induction Generator by Kader Chaker, SCAMRE Laboratory; Oran, Algérie	HIL-Grid Model on Opal-RT for testing future Grid Control Centers by Eric Glende

COCKTAIL AND DINNER

TERRACE OF THE PALAIS DES CONGRÈS OF MONTREAL

6:00 PM - 10:00 PM



CLOSING CEREMONY AND OPAL-RT'S 20th ANNIVERSARY CELEBRATION!
1001 Jean Paul Riopelle PI



Evening sponsored by: Hydro Québec



FRIDAY, SEPTEMBER 8th

BREAKFAST

LE WESTIN MONTREAL, 270 RUE SAINT-ANTOINE O

7:30 AM - 8:30 AM — Breakfast

VISITS (GROUP 1)

Pick-up from Le Westin at 8AM

9:00 AM - 10:00 AM — Hydro-Quebec Research Institute (IREQ) Visit – Group I

11:00 AM - 12:00 PM — OPAL-RT Headquarters Visit & Poster Sessions

VISITS (GROUP 2)

Pick-up from Le Westin at 9AM

10:00 AM - 11:00 AM — Hydro-Quebec Research Institute (IREQ) Visit – Group II

12:00 PM - 1:00 PM — LUNCH

1:00 PM - 3:00 PM — OPAL-RT Headquarters Visit & Poster Sessions

4:30 PM - 6:00 PM — Buses drive out, end of RT17

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